

NEW SYNONYMY AND NEW SPECIES OF AMERICAN BARK BEETLES (COLEOPTERA: SCOLYTIDAE), PART XI

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ABSTRACT.—The following new generic synonymy is proposed: *Coptodryas* Hopkins (= *Microperus* Wood), *Cyrtogenius* Strohmeier (= *Carpophloeus* Schedl, *Taphroborus* Nunberg), *Glostatus* Schedl (= *Ctonocryphus* Schedl, *Rhopalocryphus* Nunberg), *Hylurgops* LeConte (= *Hylescerites* Schedl), *Hypothenemus* Westwood (= *Ernophloeus* Nunberg), *Monarthrum* Kirsch (= *Eupteroxylon* Eggers), *Terminalinus* Hopkins (= *Kelantaninus* Nunberg), *Xylechinus* Chapuis (= *Pruniphagus* Murayama), *Xylocleptes* Ferrari (= *Hylonius* Nunberg). New combinations include: *Pityophthorus anticus* Schedl is transferred to *Araptus*; *Hylesinus machilus* Schedl is transferred to *Phloeosinus*; *Phloeophthorus acaciae* Lea is transferred to *Phloeotribus*; *Blastophagus squamosus* Schedl is transferred to *Polygraphus*; *Chramesus semibrunneus* Eggers is transferred to *Pseudochramesus*; *Dacryophthorus capensis* Schedl is transferred to *Xylechinus*; *Pseudochramesus imperialis* Schedl is transferred to *Xylechinus*; and *Hoplitontus abyssinicus* Schedl is transferred to *Xylocleptes*. New specific synonymy includes: *Hypothenemus sundaensis* (Eggers) (= *Ernophloeus costalimai* Nunberg). A note on the South American *Hylesinus antipodius* Schedl is included. New names are proposed as follows: *Hylesinopsis kenyae* for *africanus* (Schedl 1963) (from *Alniphagus*) and *Hylesinopsis ugandae* for *africanus* (Schedl 1965) (from *Hylesinus*). Species described as new to science include: *Ambrosiodmus ferus* (Mexico), *Ambrosiodmus paucus* (Costa Rica), *Carphoborus bicornis* (USA), *Chaetophloeus pouteriae* (Mexico), *Cnemonyx euphorbiae* (Mexico), *Corthylus convexifrons* (Venezuela), *Corthylus senticosus* (Mexico), *Corthylus sentosus* (Mexico), *Cryptocarenus pubescens* (Brazil), *Cryptocarenus spatulatus* (Mexico), *Dendrocranulus mexicanus* (Mexico), *Hylesinus caseariae* (Mexico), *Pityophthorus levis* (USA), and *Trischidias exigua* (Mexico).

On the following pages are recorded synonymy and nomenclatural changes that affect new synonymy of 11 genera and one species and new combinations for eight species. Two new names are proposed for new junior homonyms that were created by the transfer of species from one genus to another. In addition to these changes, 14 species are described as new to science in the genera *Ambrosiodmus* (2), *Carphoborus* (1), *Chaetophloeus* (1), *Cnemonyx* (1), *Corthylus* (3), *Cryptocarenus* (2), *Dendrocranulus* (1), *Hylesinus* (1), *Pityophthorus* (1), and *Trischidias* (1). These species are from the USA (2), Mexico (9), Costa Rica (1), Venezuela (1), and Brazil (1). Under each heading the species are listed alphabetically by genus and species.

The unique female holotype of *Coptodryas confusa* Hopkins was examined and compared to more than 20 species previously placed by me in *Microperus* Wood. Notes from my previous examination of this type that were dated 1955 indicated that it was a true *Xyleborus*. However, the current revision of the tribe places it elsewhere. In my collection under the name *Xyleborus cryphaloides* Eggers, as determined by F. G. Browne, are two different species, the larger of which is identical to the type of *C. confusa*. I have not attempted to locate the type of *cryphaloides* to review its specific status, but, regardless of the outcome of such a review, the name *Microperus* Wood must be placed in synonymy as indicated above.

GENERIC SYNONYMY

Coptodryas Hopkins

Coptodryas Hopkins, 1915, U.S. Dept. Agric. Rept. 99:10, 54 (Type-species: *Coptodryas confusa* Hopkins, original designation)

Microperus Wood 1980, Great Basin Nat. 40:94 (Type-species: *Xyleborus theae* Eggers, original designation). *New synonymy*.

Cyrtogenius Strohmeier

Cyrtogenius Strohmeier, 1910, Ent. Blätt. 6:127 (Type-species: *Cyrtogenius bicolor* Strohmeier, monobasic)
Carpophloeus Schedl, 1959, Tijdschr. Ent. 101:143 (Type-species: *Carpophloeus rugipennis* Schedl, monobasic). *New synonymy*

Taphroborus Nunberg, 1961, Ann. Mag. Nat. Hist. (13)3:617 (*Taphroborus vaticae* Nunberg, original designation). *New synonymy*

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Schedl named the monobasic *Carpophloeus* for *rugipennis* Schedl on the basis of the 3-segmented antennal funicle. Because the number of funicular segments is variable among the smaller species of *Cyrtogenius*, there is no way to distinguish Schedl's genus; consequently, it must be placed in synonymy as indicated above. The species *rugipennis* was based on two male and one female syntypes. Schedl (1979, Katalog der wissenschaftlichen Sammlungen des Naturhistorischen Museums in Wien 3 (Heft 2):216) designated the male in his collection as the lectotype of this species. The lectotype was examined.

Nunberg named *Taphroborus vaticae* from four specimens of undesignated sex. A "holotype" and paratype (both mounted on the same card on one pin) were deposited in the British Museum (Natural History). Because there is no way to tell which specimen is the type, both must be regarded as syntypes. The specimen that seems to fit the description most completely is a female and is still mounted on the card. The other specimen is a male and has subsequently been dislodged from the card and is missing the abdomen and ventral parts of the thorax. The female syntype is here designated as the lectotype and the male the allotype of Nunberg's species. This species falls well within the genus *Cyrtogenius*. For this reason, *Taphroborus* is placed in synonymy as indicated above.

Glostatus Schedl

Glostatus Schedl, 1939, Rev. Zool. Bot. Afr. 32:386 (Type-species: *Glostatus declividepressus*, monobasic)

Ctonocryphus Schedl, 1941, Rev. Zool. Bot. Afr. 34:398 (Type-species: *Ctonocryphus xyloctonus* Schedl, monobasic)

Rhopalocryphus Nunberg, 1967, Rev. Zool. Bot. Afr. 76:320 (Type-species: *Rhopalocryphus seydeli* Nunberg, monobasic). *New synonymy*

Following my examination of the types of most of the species of *Glostatus*, *Ctonocryphus xyloctonus* Schedl, and *Rhopalocryphus seydeli* Nunberg, I see only one moderately variable genus. The bisinuate basal margin of the pronotum and deeply impressed elytral striae of *Ctonocryphus* intergrade through *Rhopalocryphus* to *Glostatus* to such an extent that there is no possibility of making a generic division within the group. Both *Ctonocryphus* and *Rhopalocryphus* are placed in synonymy as indicated above.

Hylurgops LeConte

Hylurgops LeConte, 1876, Proc. Amer. Philos. Soc. 15:389 (Type-species: *Hylastes pinifex* Fitch = *Hylurgops rugipennis pinifex* (Fitch), subsequent designation by Hopkins 1914:123).

Hylescerites Schedl, 1947, Zentralbl. Ges. Ent. 2:29 (Type-species: *Hylescerites granulatus* Schedl, monobasic). *New synonymy*

Schedl named the monobasic fossil genus *Hylescerites* based on *H. granulatus* Schedl (1947:30) from Baltic amber. Neither the descriptions nor the photograph of the holotype indicate any characters that distinguish this genus and species from *Hylurgops*. In the absence of distinguishing generic characters, *Hylescerites* is placed in synonymy under the older name as indicated above.

Hypothenemus Westwood

Hypothenemus Westwood, 1836, Trans. Ent. Soc. London 1:34 (Type-species: *Hypothenemus eruditus* Westwood, monobasic)

Ernophloeus Nunberg, 1958, Acta Zool. Cracoviensia 2:484 (Type-species: *Ernophloeus costalimai* Nunberg = *Stephanoderes sundaensis* Eggers, original designation). *New synonymy*

The female holotype and two female paratypes of *Ernophloeus costalimai* Nunberg were examined and compared directly to my female homotypes of *Stephanoderes sundaensis* Eggers. Because they are quite clearly congeneric with *Hypothenemus eruditus* Westwood, Nunberg's genus must be placed in synonymy under *Hypothenemus* and his species under *sundaensis* as indicated above.

Monarthrum Kirsch

Monarthrum Kirsch, 1866, Berliner Ent. Zeitschr. 10:213 (Type-species: *Monarthrum chapuisii* Kirsch, monobasic)

Eupteroxylon Eggers, 1936, Rev. de Ent. 6:392 (Type-species: *Eupteroxylon comatum* Eggers, monobasic)

The female holotype of *Eupteroxylon comatum* Eggers is in the *laterale* Eichhoff species group of *Monarthrum*. The holotype of *comatum* was compared to a series of females of (*Cosmocorynus*) *latus* Schedl from Colombia. The Eggers species is smaller but has almost identical antennae, and they share the same general sculptural design of frons and elytra. They are obviously congeneric. For this reason, *Eupteroxylon* is placed in synonymy as indicated above.

Terminalinus Hopkins

Terminalinus Hopkins, 1915, U.S. Dept. Agric. Rept. 99:10, 57 (Type-species: *Terminalinus terminaliae* Hopkins, original designation)

Kelantaninus Nunberg, 1961, Ann. Mag. Nat. Hist. (13)3:621 (Type-species: *Xyleborus punctatopilosus* Schedl, original designation). *New synonymy*

The unique female holotype of *Terminalinus terminaliae* Hopkins was examined and compared to material in my collection. It is in the same species group with *Xyleborus major* Stebbing, *X. latus* Eggers, *X. siclus* Schedl, *X. pseudopilifer* Schedl, *X. postecipilosus* Schedl, *pilifer* Eggers, *pseudomajor* Schedl, *xanthophyllus* Schedl, and *macropterus* Schedl. Because this species group makes up part of the genus previously known as *Kelantaninus* Nunberg, Nunberg's name must be placed in synonymy under the older name *Terminalinus* as indicated above.

Xylechinus Chapuis

Xylechinus Chapuis, 1869, Synopsis des Scolytides, p. 36 (Type-species: *Hylesinus (Dendroctonus) pilosus* Ratzeburg, monobasic)

Pruniphagus Murayama, 1958, Bull. Fac. Agric. Yamaguti Univ. 9:930 (Type-species: *Pruniphagus gummensis* Murayama, original designation)

The "holotype" and "allotype" of *Pruniphagus gummensis* Murayama are mounted on the same pin. Because the description is composite, both specimens are female, and there is no clue in the description as to which is the type, I here designate the upper female that has one unbroken antenna (the club is lost on the other side of the type and on both sides in the lower specimen) as the lectotype of this species. This species is very closely allied to *Xylechinus padi* Wood but it is distinct. These two species are members of *Xylechinus*, although the scales on the pronotum and elytra are rather small and slender and the setae on the metepisternum are palmately divided. This placement requires that *Pruniphagus* be placed in synonymy as indicated above.

Xylocleptes Ferrari

Xylocleptes Ferrari, 1867, Die Forst- und Baumsuchtschädlichen Borkenkäfer, p. 37 (Type-species: *Bostrichus bispinus* Duftschmidt)

Hylonius Nunberg, 1973, Exploration du Parc National des Virunga (2)23:16 (Type-species: *Hylonius brunneus* Nunberg, original designation). *New synonymy*

A paratype of *Hylonius brunneus* Nunberg was examined. It is congeneric with *Xylo-*

cleptes bispinus (Duftschmidt); consequently, *Hylonius* must be placed in synonymy as indicated. The status of Nunberg's species was not investigated.

NEW COMBINATIONS

Araptus anticus (Schedl), n. comb.

Pityophthorus anticus Schedl, 1976, Ent. Abh. Mus. Tierk. Dresden 41:66 (Holotype, female; Río Negro, Brasil; Wien Nat. Mus.)

In the original treatment of *Pityophthorus anticus* Schedl, the sexes were reversed. This species is a member of the genus *Araptus* and is here transferred to that genus.

Phloeosinus machilus (Schedl), n. comb.

Hylesinus machilus Schedl, 1959, Indian For. Rec., n.s., Ent. 9(8):173 (Paratype; Chachpur, Chakrata, Uttar Pradesh, India; Wien Nat. Mus.; holotype lost, if it ever existed)

None of the type specimens, including the holotype of this species, that were sent by the Forest Research Institute to Schedl for study were ever returned to the FRI. After examining the loan sheets at FRI, the nontype material returned by Schedl, and the FRI specimens retained by Schedl from that loaned material, I suspect that the holotypes cited by Schedl in the descriptions of FRI species never existed. A consequence of that action is seen in the description of *Hylesinus machilus* Schedl. The head and prothorax of Schedl's paratype of this species are missing. As a result, Schedl named this species in the wrong genus even though it had been sent to him under the clearly marked manuscript designation of *Phloeosinus machili* Beeson (nomen nudum).

I have examined more than 50 specimens of this species from Uttar Pradesh, several of which bear data identical to that published by Schedl. As indicated above, it must be transferred to *Phloeosinus*.

Phloeotribus acaciae (Lea), n. comb.

Phloeophthorus acaciae Lea, 1910, Proc. Roy. Soc. Victoria, n.s., 22:146 (Syntypes; Tasmania)

A series of this species was found in the Schedl Collection (Wien Nat. Mus.). Because the genus is unknown in the area from southern Asia to Australia, except for this species, it is of special interest. The three terminal seg-

ments of the antenna are no wider than those of the funicle, smaller than in *rhododactylus* (Marshall) of Europe. This and other primitive characters suggest that this species was derived from South American stock prior to the Tertiary and has been preserved with little modification. The scutellum is not visible. Schedl (1938, Proc. Linn. Soc. N.S.W. 83:216) erroneously placed the species in *Xylechinus*, a genus quite unrelated to the one to which it belongs.

Polygraphus squamosus (Schedl), n. comb.

Blastophagus squamosus Schedl, 1975, Ent. Basil. 1:384 (Holotype; Bhutan, Dorjula; Nat. Mus. Basel)

The species named *Blastophagus squamosus* Schedl is represented in the Schedl material at Wien by one paratype. This specimen fits the description of the species, but it is a member of *Polygraphus* and must be transferred to that genus.

Pseudochramesus semibrunneus (Eggers), n. comb.

Chramesus semibrunneus Eggers, 1950, Ent. Blätt. 45-46:145 (Holotype, male; Brasil; Wien Nat. Mus.)

Schedl had the sexes reversed in this genus. The male holotype of *Chramesus semibrunneus* Eggers was examined. It is a member of the genus *Pseudochramesus* and is here transferred to the genus as indicated above.

Xylechinus capensis (Schedl), n. comb.

Dacryophthorus capensis Schedl, 1971, Opusc. Zool. Munchen 119:6 (Holotype, female; Cape Prov., South Africa; Wien Nat. Mus.)

The female holotype of *Dacryophthorus capensis* Schedl belongs to the genus *Xylechinus* and is here transferred to that genus.

Xylechinus imperialis (Schedl), n. comb.

Pseudochramesus imperialis Schedl, 1958, Acta Zool. Lilloana 16:39 (Lectotype, male; Wien Nat. Mus., present designation)

The original description of *Pseudochramesus imperialis* Schedl is composite. The "holotype" cited by Schedl (1979:122) and so labeled in his collection is here designated as the lectotype of this species. An abundance of characters indicates that it belongs to the genus *Xylechinus*. A second male in the Schedl Collection is labeled as the "holotype"

of *Xylechinus calvus* Schedl. Because I have found no description associated with this name, it is presumed to be a nomen nudum.

Xylocleptes abyssinicus (Schedl), n. comb.

Hoplitontus abyssinicus Schedl, 1965, Rev. Ent. Moçambique 8:364 (Holotype; Abyssinien; Wien Nat. Mus.)

The holotype of *Hoplitontus abyssinicus* Schedl is almost totally covered by glue. It definitely is a member of the Dryocoetini and probably is in *Xylocleptes*. A more precise identification must await a time when the glue can be dissolved to expose additional characters.

NEW NAMES

Hylesinopsis kenya, n. n.

Alniphagus africanus Schedl, 1963, Ent. Abh. Ber. Mus. Tierk. Dresden 28:259 (Holotype; Riff Valley, Kenya; Wien Nat. Mus.) *Preoccupied*

The species named *Alniphagus africanus* Schedl is a member of the genus *Hylesinopsis*. Because the transfer of this species causes it to become a junior homonym of *africanus* (Eggers 1933), a replacement name is needed. The new name *kenya* is proposed as a replacement for the Schedl species.

Hylesinopsis ugandae, n. n.

Hylesinus africanus Schedl, 1965, Nova Taxa Ent. 38:4 (Holotype; Mpanga, Uganda; British Mus. Nat. Hist.). *Preoccupied*

The transfer of *Hylesinus africanus* Schedl to *Hylesinopsis* makes this species a junior secondary homonym of *africanus* (Eggers 1933). The new name *ugandae* is proposed as a replacement for the Schedl species.

SPECIAL NOTE

Hylesinus antipodius Schedl

Hylesinus antipodius Schedl, 1951, Rev. Chil. Ent. 1:17 (Syntypes; Rengo, Chile; Wien Nat. Mus. and Museo Nacional de Historia Natural, Santiago)

Hylesinus antipodius Schedl is the only known true member of this genus in America south of Guatemala. The elytral scales are more slender than in any North American species. It appears to be more closely allied to *H. cordipennis* Lea, from Australia, than to

any other species known to me. If this is correct, then *H. antipodius* would probably have been derived from Australian stock prior to the Tertiary when island hopping was still possible between these separating land masses.

NEW TAXA

Ambrosiodmus ferus, n. sp.

This species is clearly allied to *divexulus* Wood, although only one suture is on the posterior face of the antennal club. It is distinguished from *divexulus* by the larger size, by the more gradual, more finely punctured elytral declivity, and by other characters described below.

FEMALE.—Length 2.6 mm (paratypes 2.5–2.7 mm), 2.4 times as long as wide; color black.

Frons about as in *divexulus* except a weak median carina present on upper half.

Pronotum as in *divexulus* except summit more distinct, asperities behind summit slightly larger and closer.

Elytra similar to *divexulus* except discal striae punctures slightly larger, not as deep, interstriae punctures smaller, not as deep; declivity more gradual, particularly on upper half, interstriae 1 not elevated; vestiture finer, slightly larger.

TYPE LOCALITY.—Jalapa, Veracruz, Mexico.

TYPE MATERIAL.—The female holotype and five female paratypes were taken at the type locality on 16-VIII-1983, FANM-33, from *Quercus*, by Felipe A. Noguera.

The holotype and paratypes are in my collection.

Ambrosiodmus paucus, n. sp.

This species is distinguished from *divexulus* Wood by characters described below.

FEMALE.—Length 1.9 mm (paratypes 1.8–1.9 mm), 2.2 times as long as wide; color very dark brown.

Frons about as in *divexulus* except central three-fourths without reticulation, shining.

Pronotum similar to *divexulus* except reticulation absent, asperities on posterior half distinctly larger, closer.

Elytra similar to *divexulus* except discal punctures of medium size, confused, striae

not indicated; declivity as in *divexulus* except striae and interstriae punctures distinctly smaller, interstriae 1 armed as on 3; declivital vestiture stouter, of more uniform length.

TYPE LOCALITY.—Isla del Coco, Costa Rica.

TYPE MATERIAL.—The female holotype and three female paratypes were taken at the type locality in April 1980 by George Stevens.

The holotype and paratypes are in my collection.

Carphoborus bicornis, n. sp.

This species is distinguished from *bifurcus* Eichhoff by the frontal and declivital characters that are described below.

FEMALE.—Length 1.5 mm (paratypes 1.3–1.6 mm), 2.5 times as long as wide; color dark brown, vestiture pale.

Frons convex, flattened on lower two-thirds on median half, surface reticulate; a pair of rather widely spaced, conspicuous hornlike spines just below upper level of eyes on median two-thirds, each two or more times as high as basal width in Alabama series, about as high as wide and blunt in Florida series, ventral surface of each spine with a few scales.

Pronotum and elytra as in *bifurcus* except declivital interstriae 3 with crest of elevation wider, denticles more numerous and much more strongly confused.

MALE.—Similar to female except frons as in male *bifurcus*.

TYPE LOCALITY.—Fayette, Alabama.

TYPE MATERIAL.—The female holotype, male allotype, and two paratypes were taken at the type locality V-159-10037, from *Pinus*, by Walter Grimes. Fourteen paratypes were taken at Archibald Biological Station, Lake Placid, Florida, 7 March 1984, *Pinus clausa*, by Mark Deyrup.

The holotype, allotype, and paratypes are in my collection.

Chaetophloeus pouteriae, n. sp.

This species is distinguished from *insularis* (Blackman) as indicated by characters described below. This is the third species in the group lacking submarginal crenulations behind the marginal row at the base of the elytra.

MALE.—Length 1.2 mm (paratypes 1.1–1.2 mm), 1.8 times as long as wide; color dark brown, vestiture pale.

Frons as in *insularis* except impression less extensive above eyes.

Pronotum as in *insularis* except punctures much smaller, more definite, spaces between punctures almost smooth; scales shorter, broader, those on anterior margin conspicuously longer.

Elytra as in *insularis* except stria punctures deeper, very slightly larger; scales in ground cover much stouter.

FEMALE.—Similar to male except frons almost flat on lower half, convex above.

TYPE LOCALITY.—Campo Experimental. INIF, Escarcega, Campeche, Mexico.

TYPE MATERIAL.—The male holotype, female allotype, and six paratypes were taken at the type locality on 9-I-1984, AEV-85, *Pouteria campechana*, by A. Estrada V.

The holotype, allotype, and paratypes are in my collection.

Cnemonyx euphorbiae, n. sp.

This species is distinguished from *splendens* Wood by characters described below.

FEMALE.—Length 2.5 mm (male paratypes 2.3 mm), 2.04 times as long as wide; color reddish brown.

Frons with median two-thirds from epistoma to upper level of eyes rather abruptly, concavely impressed, impressed area densely, rather coarsely punctured and ornamented by numerous, erect, rather stout setae of uniform length; epistoma not subcarinate as in *splendens*. Antenna about as in *splendens*.

Pronotum as in *splendens* except anterior constriction more distinct, punctures coarser and closer.

Elytra about as in *splendens* except interstitial punctures confused, declivital interstriae less strongly elevated, declivital interstitial setae much smaller, almost obsolete, hairlike.

MALE.—Similar to female except frons convex, glabrous, punctures less dense.

TYPE LOCALITY.—Cañon de Lobos, Yautepec, Morelos, Mexico.

TYPE MATERIAL.—The female holotype, male allotype, and two male paratypes were taken at the type locality on 14 Marzo 1984, 1,400 m, SM-247, by Edgar Martinez F.

The holotype, allotype, and paratypes are in my collection.

Corthylus convexifrons, n. sp.

This species is unique and does not fit into any known species group. The female frons is convex and glabrous, the general pronotal and elytral features are much as in the larger *Corthyllocurus* species.

FEMALE.—Length 3.4 mm (paratypes 2.9–3.6 mm), 2.4 times as long as wide; rather light reddish brown.

Frons evenly, strongly convex, median fourth with a slight elevation, a small median tubercle on elevation; surface finely reticulate, punctures minute, sparse; glabrous. Antennal club slightly asymmetrical, two feebly procurved sutures present; posterior face bearing a small tuft of hair arising from lateral half of all three segments, extending slightly beyond tip of club.

Pronotum 1.1 times as long as wide; sides almost straight and subparallel on basal half, broadly rounded in front; anterior margin subcostate, with about eight weak serrations indicated; posterior half reticulate, punctures sparse, minute. Glabrous.

Elytra 1.36 times as long as wide, 1.44 times as long as pronotum; sides almost straight and parallel on basal three-fourths, very broadly rounded behind; disc subreticulate, punctures small, shallow, distinct, confused. Declivity very steep, shallowly sulcate on median third; lateral margins on upper half armed by two pairs of small, blunt tubercles; a weak ventrolateral margin indicated on median third. Almost glabrous.

MALE.—Similar to female except epistomal elevation poorly formed, anterior margin of pronotum with two coarse serrations, declivital impression slightly stronger.

TYPE LOCALITY.—La Mucuy, 20 km west of Merida, Merida, Venezuela.

TYPE MATERIAL.—The female holotype, male allotype, and 13 paratypes were taken at the type locality on 12-XI-1969, 2,500 m, No. 131, from an unidentified tree branch, by me. Paratypes include: 6 from the type locality taken 22-XII-1969, No. 207, from a tree seedling; 19 from La Carbonera Experimental Forest, 50 km west of Merida, Merida, Venezuela, 9-XII-1969, 2,500 m, No. 174 from *Nectandra* branches; all were taken by me.

The holotype, allotype, and paratypes are in my collection.

Corthylus senticosus, n. sp.

This species is distinguished from *sentus* Wood by characters of the frons, antenna, and elytral declivity as described below.

FEMALE.—Length 1.5 mm (allotype 1.8 mm), 2.1 times as long as wide; color very dark brown.

Frons extensively excavated as in *sentus* except vestiture on vertex slightly shorter, lateral spongy areas slightly larger, a large longitudinal, cylindrical, subcarinate elevation extending from just above epistoma to just below middle of frons; excavated area glabrous except for fringe of long hair on vertex. Antennal club much less asymmetrical.

Pronotum as in *sentus*.

Elytra resembling *sentus* except disc mostly subreticulate, punctures mostly obsolete; declivity steeper, interstriae 2 on upper third rather strongly, narrowly elevated and armed by small, pointed denticles to middle of declivity, sutural interstriae not elevated or armed.

MALE.—Similar to female except frons convex, reticulate, subglabrous; anterior margin of pronotum armed by two serrations.

TYPE LOCALITY.—Jalapa, Veracruz, Mexico.

TYPE MATERIAL.—The female holotype and male allotype were taken at the type locality on 23-X-1983, FANM-77, from *Psitacanthus schiedeana*, by Felipe A. Noguera.

The holotype and allotype are in my collection.

Corthylus sentosus, n. sp.

This species is distinguished from *sentus* Wood by characters of the frons, antenna, and elytral declivity as described below.

FEMALE.—Length 1.9 mm (allotype and paratype 2.0 mm), 2.3 times as long as wide; color very dark brown.

Frons as in *sentus* except spongy areas more widely separated below but extending well above upper level of eyes laterally, their inner margins on upper half each bearing a row of about six long, coarse setae, setae on vertex much shorter. Antennal club about as in *senticosus* Wood.

Pronotum as in *sentus* except disc without crenulations.

Elytra as in *sentus* except devoid of punctures, uniformly subreticulate; declivity retic-

ulate, interstriae 2 on middle half distinctly, rather weakly elevated, crest of this elevation armed by a row of four fine denticles.

MALE.—Similar to female except frons convex, reticulate, subglabrous; anterior margin of pronotum armed by two small serrations.

TYPE LOCALITY.—Km 32 on Carretera Patzcuaro-Ario de Rosales, Michoacán, Mexico.

TYPE MATERIAL.—The female holotype, male allotype, and one female paratype were taken on 31-X-1980, 2,360 m, S-130, from *Psitacanthus* sp., by T. H., Atkinson and Armando Equihua.

The holotype, allotype, and paratype are in my collection.

Cryptocarenum pubescens, n. sp.

This unique species is the largest, stoutest, most pubescent member of the genus.

FEMALE.—Length 3.1 mm, 2.3 times as long as wide; color reddish brown.

Frons broadly convex; coarsely, closely, subrugosely punctured from epistoma to vertex; median line from upper level of eyes with an impunctate, transversely strigose, low, subcarinate elevation; vestiture fine, rather long, moderately abundant. Antennal sutures more strongly procurved than usual for this genus.

Pronotum as long as wide; sides weakly arcuate and subparallel on basal half, somewhat narrowly rounded in front, anterior margin armed by 14 serrations; anterior slope armed by numerous asperities of moderate size; posterior areas finely punctured, punctures on disc finely granulate. Vestiture of fine, erect, rather abundant hair.

Elytra 1.4 times as long as wide, 1.4 times as long as pronotum; sides almost straight and parallel on basal two-thirds, rather broadly rounded behind; surface almost smooth and shining, punctures rather small, shallow, confused, rather close. Declivity rather steep, convex; surface obscurely reticulate, punctures as on disc.

TYPE LOCALITY.—Sixty-nine km north of Manaus, Brazil.

TYPE MATERIAL.—The unique female holotype was taken at the type locality on 7-XII-1979, by George Stevens.

The holotype is in my collection.

Cryptocarenum spatulatus, n. sp.

This species is distinguished from *lepidus* Wood by characters described below.

FEMALE.—Length 1.8 mm (Paratypes 1.8 mm), 2.5 times as long as wide; color dark reddish brown.

Frons as in *lepidus* except subparallel aciculations on upper two-thirds of frons deeper.

Pronotum about as in *lepidus* except asperities much coarser, resembling *Hypotheneumus*; anterior margin armed by 6–8 serrations.

Elytra as in *lepidus* except declivity steeper; stria punctures more deeply impressed, interstriae more regularly punctured; vestiture extending to base on at least odd-numbered interstriae, regular on posterior half of elytra on all interstriae, much more closely spaced than in *lepidus*, each seta erect, strongly flattened on its distal half, about twice as wide as in *lepidus*.

TYPE LOCALITY.—Sta. María Chimalpa, Oaxaca, Mexico.

TYPE MATERIAL.—The female holotype and seven paratypes were taken at the type locality on 10-II-1984, 250 m, S-977, *Struthanthus*, by Armando Equihua. One paratype is labeled 5 mi N. Mazatlan, Sinaloa, Mexico, 24-VII-1964, H. F. Howden. A specimen, not designated as a paratype, is labeled Peru, 12-IX-1963, E. M. Jones, in derus plant intercepted at Miami.

The holotype and seven paratypes are in my collection; one paratype is in the Canadian National Collection.

Dendrocranulus mexicanus, n. sp.

This species is distinguished from the allied *costaricensis* Eggers by the characters described below.

FEMALE.—Length 2.5 mm (paratypes 2.2–2.5 mm), 2.7 times as long as wide; color very dark brown.

Frons as in *costaricensis* except punctures mostly finely granulate; vestiture equal in abundance but conspicuously shorter and of darker color.

Pronotum as in *costaricensis* except punctured area smaller, asperities slightly larger and more extensive in posterolateral areas; punctures in discal area mostly with fine granule on lateral margin.

Elytra as in *costaricensis* except surface on basal fourth of disc more wrinkled; declivity not quite as steep, stria punctures smaller, fine interstria granules replace punctures; vestiture similar but finer on disc and declivity.

MALE.—Similar to female except frons more strongly convex above, punctures obscure except laterally, vestiture sparse, inconspicuous; elytral declivity similar to *costaricensis* except not as steep, more strongly impressed on interstriae 2, 3 higher, granules on 2 not evident; setae a bit more slender.

TYPE LOCALITY.—Naolinco, Veracruz, Mexico.

TYPE MATERIAL.—The female holotype, male allotype, and six paratypes were taken at the type locality on 28-I-1984, FANM-120, from *Sechium edulis*, F. A. Noguera M.

The holotype, allotype, and paratypes are in my collection.

Hylesinus caseariae, n. sp.

This species is distinguished from *californicus* Swaine by the more deeply, more broadly impressed male frons, by the less distinct, slightly longer female frontal carina, by the less strongly impressed declivital interstriae 2 in both sexes, and by the smaller, stouter scales on pronotum and elytra.

MALE.—Length 2.5 mm (paratypes: male 2.8 mm, females 2.6 mm), 1.8 times as long as wide; color pattern as in *californicus* except with more dark brown scales, fewer pale scales.

Frons resembling *californicus* except impression deeper, extending higher on vertex, much broader, lateral margins higher, more abruptly rounded to upper level of eyes; median line feebly elevated.

Pronotum about as in *californicus* except rugose-reticulation stronger, asperities apparently smaller and more numerous, scales smaller, usually stouter.

Elytra similar to *californicus* except interstriae 2 very slightly less strongly impressed, tubercles on 1 and 3 and base of 2 smaller, closer, more definite; erect scales on 1 more slender, each 2.5–3.0 times as long as wide, those on 3–7 distinctly smaller, slender setae on 8, 9, and basal half of 7 much more slender, hairlike; scales in ground cover smaller, stouter.

FEMALE.—Similar to male except frons basically convex as in *californicus* except carina lower and slightly longer; declivital interstriae 3 not impressed, resembling 1 and 3, erect scales normal, not enlarged.

TYPE LOCALITY.—Acajete, Veracruz, Mexico.

TYPE MATERIAL.—The male holotype, female allotype, and one male and one female paratype were taken at the type locality on 22-XI-1983, FANM-92, from *Casearia* (Flacourtiaceae), by Felipe A. Noguera.

The holotype, allotype, and paratypes are in my collection.

Pityophthorus levis, n. sp.

This species is distinguished from the *boycei* Swaine and the *comosus* Blackman groups of species by the virtually impunctate, subglabrous frons that is not sexually dimorphic and by the elytral declivity that resembles neither group.

FEMALE.—Length 2.5 mm (paratypes 2.2–2.7 mm), 2.7 times as long as wide; color dark brown, elytra often reddish brown.

Frons broadly convex; surface smooth, shining, a few minute punctures; subglabrous, a few fine, short setae usually present. Antennal club resembling *comosus* except sutures almost straight.

Pronotum resembling *comosus* except summit not as high, punctures on posterior areas considerably smaller, shallow, much more widely spaced.

Elytra resembling *boycei* except discal punctures slightly larger and less numerous, confused, declivity steeper, lateral convexities more abrupt, interstriae 2 narrower on lower half, tubercles (about 6) conspicuously larger. Vestiture fine, rather long on declivity, absent on interstriae 2, very short on 1.

TYPE LOCALITY.—Fifteen miles northwest of Flagstaff, Arizona (Hart's Prairie Road).

TYPE MATERIAL.—The female holotype, male allotype, and 13 paratypes were taken at the type locality on 18-IX-1984, from lateral shoots of *Pinus ponderosa*, by M. R. Wagner.

Trischudias exigua, n. sp.

This is the fourth species named in this genus. It is distinguished from the closely allied *atoma* (Hopkins) as described below.

FEMALE.—Length 0.8 mm (paratypes 0.8–0.9 mm), 2.1 times as long as wide; color very dark brown, almost black.

Frons as *atoma* except without a median impression.

Pronotum resembling *atoma* except anterior margin armed by four serrations, asperities higher and apparently less numerous, surface smooth, shining, without any indication of reticulation. Vestiture mostly hairlike, a few stouter setae on posterior areas.

Elytra about as in *atoma* except stria punctures much smaller, weakly impressed, interstitial granules much smaller (half as large), erect interstitial scales of equal length but only half as wide, each about four times as long as wide.

TYPE LOCALITY.—Campo Experimental, INIF, Escarcega, Campeche, Mexico.

TYPE MATERIAL.—The female holotype and six paratypes were taken at the type locality on 15-II-1984, AEY-111 from *Belotia campbelli*, by A. Estrada V.

After the above description was prepared, a series from southern Florida was examined. These are not part of the type series.

The holotype and paratypes are in my collection.